

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A wireless local area network adapted for use by users traveling on a mobile platform, the network comprising:

a network server located on the mobile platform; and

a plurality of network access points each independently associated with a specified cell area on the mobile platform, each being connected to the server, each network access point being accessible wirelessly by at least one user portable electronic device over one of a plurality of wireless channels having non-overlapping frequencies; and

wherein each of the network access points is configured to wirelessly communicate with said portable electronic device within an associated one of a plurality of cell areas on the mobile platform, and is further configured to communicate with said portable electronic device that is roaming into a second one of said cell areas on the mobile platform from a first one of said cell areas on the mobile platform.

2. (currently amended) The wireless local area network of claim 1, wherein the network access points are spaced apart within an interior area of the platform.

3. (currently amended) The wireless local area network of claim 1, wherein at least one of the access points is configured so that a line replaceable unit of an aircraft system and an antenna of the access point are separated by a distance at which a field strength of the antenna is less than interference thresholds of the line replaceable unit.

B/ 4. (currently amended) The wireless local area network of claim 1, wherein each of the network access points comprises an antenna mounted in an overhead area of the mobile platform.

5. (currently amended) The wireless local area network of claim 1, wherein each of the network access points is configured to provide a wireless link only to portable electronics devices predetermined to meet predetermined standards for at least one of interference, health and safety.

6. (currently amended) The wireless local area network of claim 5, wherein each of the network access points is further configured to ignore any portable electronic device not predetermined to meet the predetermined standards.

7. (cancelled)

8. (currently amended) The wireless local area network of claim 1, wherein each of the network access points is configured to transmit and receive signals using a spread-spectrum modulation method.

9. (currently amended) The wireless local area network of claim 8₁ wherein each of the network access points is configured to transmit and receive signals using direct sequence spread spectrum transmission.

B 10. (currently amended) The wireless local area network of claim 1₁ wherein each of the access points comprises an antenna configured to communicate over a channel not being used by an adjacent access point antenna.

11. (currently amended) The wireless local area network of claim 9₁ wherein at least one of the channels is assigned to more than one of the access points.

12. (currently amended) The wireless local area network of claim 1₁ wherein each of the access points transmits at a radiated power between 1 and 5 milliwatts.

13. (currently amended) The wireless local area network of claim 1₁ wherein each of the access points communicates with the portable electronic devices at frequencies at and above about 2.40 GHz.

14. (currently amended) The wireless local area network of claim 13₁ wherein each of the access points communicates with the portable electronic devices at between about 2.40 and 2.483 GHz.

B 15. (currently amended) The wireless local area network of claim 1, further comprising at least one antenna system configured to transmit to and receive data from a ground-based system.

16. (currently amended) A method for providing, to users on board a mobile platform, a wireless local area network operating at a given frequency band to connect users to a wide area network, the method comprising the steps of:

31 distributing use of a plurality of wireless channels in the frequency band to a plurality of network access points having antennas spaced apart within an interior area of the mobile platform, the distributing step performed such that no two ~~adjacent~~ adjacently positioned access point antennas use the same frequency; and

enabling wireless access to the wide area network, by user portable electronic devices, to the access points when the portable electronic devices are within a given proximity to at least one of the access point antennas.

17. (currently amended) The method of claim 16, further comprising the step of allowing access to an access point only by a user portable device that meets predetermined standards for at least one of health, safety and electromagnetic interference.

18. (currently amended) The method of claim 16, further comprising the step of determining a cell size for each access point.

19. (currently amended) The method of claim 18, wherein the step of determining said cell size comprises the steps of:

determining an effective cell radius for an access point antenna; and

b/ locating the access point antenna so that users of the access point antenna are within the cell radius relative to the access point antenna.

20. (currently amended) The method of claim 16, wherein the plurality of channels comprise non-overlapping channels.

21. (currently amended) The method of claim 20, wherein the non-overlapping channels comprise three channels.

22. (currently amended) The method of claim 16, wherein the step of distributing use of a plurality of channels comprises assigning a channel to more than one said access point.

23. (currently amended) A wireless local area network configured to operate at a given spectrum band and adapted for use by users traveling on ~~an aircraft~~ a mobile platform, the network comprising:

a network server located on the ~~aircraft~~ mobile platform; and

B/ a plurality of network access points on the mobile platform connected to the server and configured to transmit wirelessly to at least one user portable electronic device on the mobile platform using direct sequence spread spectrum transmission technique.

24. (currently amended) The wireless local area network of claim 23, wherein each of the access points is configured to transmit at a radiated power of between one and five milliwatts.

25. (currently amended) The wireless local area network of claim 23, wherein more than one of the access points is configured to transmit over the same channel of the ~~network~~ spectrum band.
